

09/672,636

00AB151

REMARKS

Claims 1-29 are currently pending in the subject application and are presently under consideration. Claims 1, 15, and 29 have been amended herein for clarification purposes. A listing of all pending claims is found at pages 2-7 of this Reply.

Favorable reconsideration of the application is respectfully requested in view of the amendments and comments herein.

I. Rejection of Claims 1, 2-6, 8-9, 11-13, 15-20, 22-24, and 29 Under 35 U.S.C. §103(a)

Claims 1, 2-6, 8-9, 11-13, 15-20, 22-24, and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schaffstein *et al.* (U.S. Patent No. 6,140,994) in view of Fleming *et al.* (U.S. Patent No. 4,439,759). It is submitted that this rejection should be withdrawn for at least the following reasons. Neither Schaffstein *et al.* nor Fleming *et al.*, alone or in combination, teach or suggest every aspect set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) ***must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).***

The present invention relates generally to the field of video displays and more particularly to an improved ***raster engine with multi-mode programmable blinking***. (See, e.g., page 1, lines 4-6.) The claimed invention allows for finer grained *pixel* blinking control than was previously available using conventional character dot blinking methodologies. (See, e.g., page 18, lines 18-19.) Independent claim 1 has been amended to set forth “a

09/672,636

00AB151

raster engine adapted to receive video data from the frame buffer, to format the video data, and to render the formatted data to the display; and a hardware blink logic system operatively associated with the raster engine to selectively blink at least one pixel on the display; wherein formatting the video data comprises selectively remapping the video data to a format appropriate for interfacing with a selected one of a plurality of display device types." Independent claims 15 and 29 have been amended to set forth similar aspects. Support for the amendments can be found at, for example, page 22, lines 8-11 of the subject application.

As stated in the Reply Office Action dated October 21, 2003, the raster engine of the subject claims *"is easily programmed to interface a computer system running a variety of application programs with a plurality of disparate display types.* The invention can thus be employed in high end as well as highly cost sensitive computer system applications in association with displays *ranging from high definition television (HDTV) to low resolution monochrome EL and/or LCD display panels.*" (Page 4, lines 25-30.) The raster engine of the subject claims is capable of *formatting video data for rendering to a display.* (See, e.g., Claims 1, 15, and 29.) "In addition, the raster engine can further comprise an integrated digital to analog converter (DAC) *to support analog LCD displays and CRTs.*" (Page 9, lines 11-12.) Moreover, "The raster engine 2...*provides for selective remapping of the pixel data from the frame buffer format to a format appropriate* for interfacing to a selected display device type, without requiring rerouting of signal outside of the raster engine." (Page 22, lines 8-11.) Schaffstein *et al.* does not disclose such aspects of the present invention as set forth in the subject claims.

Contrary to the Examiner's reiterated assertion that Schaffstein *et al.* *formats* pixel data, Schaffstein *et al.* merely discusses a system wherein a multiplexer (MUX) 20 either passes or blocks an input signal 22, 24 based on the presence of a select signal 38. Such select signal 38 is generated based in part on a raster operation (ROP) code 90. However, an ROP code is merely a binary value (1 for true, 0 for false) that can be ANDed with a key code combination 86 to cause a select signal generator 50 to send an appropriate select signal 38 to the MUX 20, which will then *merely pass or block a particular input signal.* The ROP code is not a raster engine as claimed in the subject claims and supported by the subject specification. Furthermore, there is no indication or suggestion whatsoever in Schaffstein *et*

09/672,636

00AB151

al. of a raster engine that can receive input data from a frame buffer and *format and/or remap* such data in any manner for *transmission to a particular display device*. Rather, input is merely permitted to pass or is not permitted to pass to the display device *via* the MUX, but *input data is not formatted, remapped, or altered in any way from its original state (e.g., its state upon leaving the frame buffer 26).*

Fleming *et al.* fails to overcome the deficiencies of Schaffstein *et al.* with respect to independent claims 1, 15, and 29. Fleming *et al.* merely discusses a plurality of algorithms for blinking elements. Fleming *et al.* does not teach or suggest *formatting video data and selectively remapping video data to a format appropriate for interfacing with a selected one of a plurality of display device types*, as set forth in the subject claims.

Therefore, it is readily apparent that neither Schaffstein *et al.* nor Fleming *et al.*, alone or in combination, make obvious applicants' claimed invention as set forth in independent claims 1, 15, and 29 (and claims 2-6, 8, 9, 11-13, 16-20, and 22-24, which depend respectively there from). Accordingly, withdrawal of this rejection is respectfully requested.

II. Rejection of Claims 25-27 Under 35 U.S.C. §103(a)

Claims 25-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schaffstein *et al.* in view of Fleming *et al.*, and further in view of Wakeland *et al.* (U.S. Patent No. 5,258,836). It is submitted that this rejection should be withdrawn for at least the following reasons. Neither Schaffstein *et al.* nor Fleming, *et al.* nor Wakeland *et al.*, alone or in combination, teach or suggest every limitation set forth in the subject claims.

Claims 25-27 depend indirectly from independent claim 15, which is believed to be allowable for the aforementioned reasons. Wakeland *et al.* does not make up for the deficiencies of Schaffstein *et al.* and Fleming, *et al.* with respect to independent claim 15. Specifically, Wakeland *et al.* does not teach or suggest a *raster engine* that receives data from a frame buffer and *formats such data for transmission* directly to a display device, let alone *selectively remapping video data to a format appropriate for interfacing with a selected one of a plurality of display device types*.

In view of at least the foregoing, withdrawal of this rejection is respectfully requested.

09/672,636

00AB151

III. Rejection of Claims 7, 14, 21, and 28 Under 35 U.S.C. §103(a)

Claims 7, 14, 21, and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Schaffstein *et al.* in view of Fleming *et al.*, and further in view of Wise (U.S. Patent No. 6,326,999). It is submitted that this rejection should be withdrawn for at least the following reasons. The subject claims depend respectively from independent claims 1 and 15, which, in view of the comments above in Section I, are not made obvious by Schaffstein *et al.* or Fleming *et al.*

Wise *et al.* fails to overcome the deficiencies of Schaffstein *et al.* and Fleming *et al.* with respect to independent claims 1 and 15. Specifically, Wise *et al.* does not teach or suggest a raster engine that receives data from a frame buffer and *formats such data for transmission* to a display device, let alone a *raster engine that remaps pixel data* for interfacing with a particular one of a plurality of display devices.

In view of at least the above, the cited references, taken alone or in combination, do not make obvious claims 1 and 15 (and claims 7, 14, 21, and 28, which depend respectively there from). Withdrawal of this rejection is respectfully requested.

IV. Rejection of Claim 10 Under 35 U.S.C. §103(a)

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Schaffstein *et al.* in view of Fleming *et al.*, and further in view of Shibata *et al.* (U.S. Patent No. 4,845,477). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 10 depends from independent claim 1, which, as stated above, is not made obvious by Schaffstein *et al.* or by Fleming *et al.*, alone or in combination. Shibata *et al.* fails to overcome the deficiencies of Schaffstein *et al.* and Fleming *et al.* with respect to independent claim 1. Specifically, Shibata *et al.* fails to teach or suggest a raster engine that *formats or remaps data for transmission* to a particular display device. Therefore, it is respectfully submitted that this rejection should be withdrawn.

09/672,636

00AB151

CONCLUSION


The present application is believed to be condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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